

In the Claims:

1-7 (withdrawn).

8 (currently amended). A method for providing carbon dioxide to a plant, comprising the steps of:

~~(a)~~ providing a chamber and enclosing at least a portion of said plant within said chamber;

~~(b)~~ providing a gas source capable of providing a first gas substantially free of carbon dioxide;

~~(c)~~ providing a carbon dioxide generator in fluid communication with said chamber and said gas source, said generator comprising a vessel containing an aqueous solution ~~of at least one of hydrogen carbonate ions and carbonate ions~~;

adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said solution;

causing, in said solution, the formation of carbon dioxide from said solid source of at least one of hydrogen carbonate ions and carbonate ions in a manner substantially without the addition of acid;

~~(d)~~ ~~producing carbon dioxide from said aqueous carbonate solution by processing said solution in a way that causes said carbon dioxide in said solution~~ formed from said solid source to diffuse from said solution; and

~~(e)~~ mixing said carbon dioxide ~~eff-gassed~~ diffused from said solution with said first gas to produce a gas mixture having a determinable level of carbon dioxide and flowing said gas mixture into said chamber; ~~and~~

~~(f)~~ ~~adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said generator;~~

~~wherein the step of producing carbon dioxide from said aqueous carbonate solution includes producing said carbon dioxide substantially without the addition of acid.~~

9 (currently amended). The method of claim 8, wherein ~~said carbon dioxide producing~~ processing step comprises the step of agitating said solution to cause carbon dioxide to be emitted from said solution.

10 (currently amended). The method of claim 9, wherein said step of agitating said solution comprises flowing said first gas through said ~~aqueous-carbonate~~ solution.

11 (canceled).

12 (currently amended). The method of claim 8, wherein the step of producing carbon dioxide from said ~~aqueous-carbonate~~ solution includes one or more of the following steps:

stirring said ~~aqueous-carbonate~~ solution while moving a gaseous phase material across the top surface of said ~~aqueous-carbonate~~ solution; and

flowing a gaseous phase material through said ~~aqueous-carbonate~~ solution.

13 (canceled).

14 (currently amended). The method of claim 8, wherein said step of producing carbon dioxide from said ~~aqueous-carbonate~~ solution includes evacuating a gaseous phase substance above a top surface of said solution so as to facilitate diffusion of carbon dioxide from said solution into the evacuated space.

15 (currently amended). A method for providing an elevated level of carbon dioxide to a plant culturing environment, comprising the steps of:

~~(a)~~ forming an enclosure to surround a plant;

~~(b)~~ providing a carbon dioxide generator in fluid communication with said enclosure, said generator comprising a vessel containing an aqueous solution;

adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said solution;

forming carbon dioxide in said solution from said solid source of at least one of hydrogen carbonate ions and carbonate ions ~~being added at least in part to said generator as a solid in a manner that is~~ substantially free of the addition of acid to said solution; and

~~(e)~~ producing carbon dioxide from said ~~aqueous-carbonate~~ solution by causing carbon dioxide in said solution to diffuse from said solution in a sufficient quantity so as to elevate the level of carbon dioxide in said enclosure above ambient level;

wherein the steps of forming carbon dioxide in said solution and producing carbon dioxide from said ~~aqueous-carbonate~~ solution both includes one or more of the steps of:

stirring said ~~aqueous-carbonate~~ solution while evacuating a gaseous phase substance above a top surface of said solution so as to facilitate diffusion of carbon dioxide from said solution into the evacuated space; and

flowing a gaseous phase substance through said ~~aqueous-carbonate~~ solution; and

~~wherein the step of producing carbon dioxide from said aqueous carbonate solution includes producing said carbon dioxide substantially without the addition of acid.~~

16 (currently amended). The method of claim 15, wherein the steps of forming carbon dioxide in said solution and producing carbon dioxide from said ~~aqueous-carbonate~~ solution both includes both said stirring step and said flowing step.

17-18 (canceled).

19 (currently amended). The method of claim 15, further comprising the step of channeling a gaseous substance containing carbon dioxide from said ~~aqueous-carbonate~~ solution to a defined output.

20 (canceled).

21 (currently amended). The method of claim 15, further comprising the step of flowing said ~~aqueous-carbonate~~ solution through said vessel.

22 (original). The method of claim 15 wherein said enclosure is a greenhouse.

23 (currently amended). A method for providing carbon dioxide to an environment, comprising:

~~(a)~~ placing a carbon dioxide generator in an environment, said generator comprising a vessel containing an aqueous solution;

adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said solution;

forming carbon dioxide in said solution from said solid source of at least one of hydrogen carbonate ions and carbonate ions in such a manner that does not include the substantial addition of acid to said solution;

(b) processing said ~~aqueous carbonate~~ solution to produce carbon dioxide by causing carbon dioxide formed in said solution from said solid source to diffuse from said solution, ~~wherein said carbon dioxide is produced substantially without addition of acid to said aqueous carbonate solution;~~ and

(c) producing carbon dioxide from said aqueous solution in a sufficient quantity so as to elevate the level of carbon dioxide in said environment, ~~and~~

~~adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said generator.~~

24 (previously presented). The method of claim 23, wherein said step of processing said solution comprises flowing a gas through said aqueous solution.

25 (currently amended). The method of claim 23, wherein said step of processing said solution includes one or more of the steps of:  
stirring said ~~aqueous carbonate~~ solution;

flowing a gaseous phase substance through said ~~aqueous carbonate~~ solution; and

evacuating the gaseous phase substance above a top surface of said solution so as to facilitate diffusion of carbon dioxide from said solution into the evacuated space.

26 (canceled).

27 (original). The method of claim 23, further comprising the step of flowing said aqueous solution through said vessel.

28 (original). The method of claim 23 wherein said environment is a plant culturing environment.

29-31 (withdrawn).

32 (currently amended). The method of claim 8, further comprising the step of:

channeling a gaseous substance containing carbon dioxide from said ~~aqueous-carbonate~~ solution to a defined output.

33 (currently amended). The method of claim 15, wherein said step of producing carbon dioxide from said ~~aqueous-carbonate~~ solution includes the step of evacuating a gaseous phase substance above a top surface of said solution so as to facilitate diffusion of carbon dioxide from said solution into the evacuated space.

34 (currently amended). The method of claim 23, further comprising the step of:

channeling a gaseous substance containing carbon dioxide from said ~~aqueous-carbonate~~ solution to a defined output.